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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/359,083	07/22/1999	VIRGIL M. DAVIS	VISAP016	2317
22434	7590	05/09/2006	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			LIVERSEDGE, JENNIFER L	
			ART UNIT	PAPER NUMBER
			3628	

DATE MAILED: 05/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/359,083	<b>Applicant(s)</b> DAVIS ET AL.	
	<b>Examiner</b> Jennifer Liversedge	<b>Art Unit</b> 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 34-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 34-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

This Office Action is responsive to Applicant's amendment and request for reconsideration of application 09/359,083 filed on March 22, 2006.

The amendment contains amended claims: 1, 41.

The amendment contains original claims: 2-8.

The amendment contains previously presented claims: 34-40, 42-43.

Claims 9-33 have been canceled (as in previous amendment).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, and 34-43 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,282,522 B1 to Davis et al (further referred to as Davis).

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

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under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Davis discloses an on-line purchase and load (OPAL) server for performing a transaction over a network (column 6, lines 18-26) using a virtual smart card (column 11, lines 1-14), said OPAL comprising a virtual card database having a plurality of records (column 10, lines 60-63), each record including a virtual card identifier and a balance corresponding to a single smart card (column 11, lines 20-26 and lines 60-67; column 13, lines 3-6; column 16, lines 6-10 and lines 25-34); a hardware security module (column 8, lines 22-25; column 10, lines 54-58; and column 11, lines 48-67); a smart card emulator that receives smart card commands and processes said commands in conjunction with said virtual smart card database and said hardware security module (column 7, lines 6-21; column 8, lines 22-24; column 10, lines 50-65; and column 11, lines 48-57); a pseudo card reader module that receives said smart card commands over said network and relays said commands to said smart card emulator, whereby said OPAL server performs a transaction over said network using one of said records in said virtual smart card database (column 7, lines 6-21; column 8, lines 22-24; column 10, lines 50-65; and column 11, lines 48-57).

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Regarding claim 2, Davis discloses an OPAL server wherein the virtual card database further includes purchase algorithm identifiers (column 17, lines 52-56), and wherein the hardware security module includes a plurality of purchase algorithms that are identified for use by one of said purchase algorithm identifiers, whereby the hardware security module may be used to perform cryptographic functions associated with a purchase (column 22, line 56 – column 24, line 51).

Regarding claim 3, Davis discloses an OPAL server further comprising a user verification module that verifies a user accessing the OPAL server and generates a user identifier, the user identifier being suitable to identify one of the virtual smart card records in the card database (column 11, lines 39-47; column 16, lines 52-64).

Regarding claim 4, Davis discloses an OPAL server wherein the smart card emulator and pseudo card reader module are implemented as a single software module (column 12, lines 1-60; column 24, lines 54-60).

Regarding claim 5, Davis discloses an OPAL server wherein the network is an internet over which the OPAL server communicates with a merchant server and a payment server to transact a purchase (column 1, lines 12-16 and column 6, lines 18-65).

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Regarding claim 6, Davis discloses an OPAL server wherein the network is an internet over which the OPAL server (Figure 3; column 5, lines 30-38; column 11, lines 1-15) communicates with a bank server and a load server to load value onto the virtual smart card (Figure 10; column 3, lines 21-26; column 5, lines 32-34; column 8, lines 64-66; column 11, lines 1-6).

Regarding claim 7, Davis discloses an OPAL server wherein the network is an internet over which the OPAL server communicates with a web server and an authentication server to authenticate a user (column 13, lines 32-35 and column 26, lines 18-50).

Regarding claim 8, Davis discloses an OPAL server wherein the OPAL server communicates over the network with a payment gateway for funding account authorization and clearing (column 10, lines 27-65).

Regarding claim 34, Davis discloses an OPAL server wherein the smart card emulator is suitable for retrieving one of said records from said virtual smart card database, increasing or decreasing the balance of the record, and then returning the record to the virtual smart card database (column 4, lines 3-5; column 7, lines 11-15; column 14, lines 55-58; column 16, lines 22-38).

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Regarding claim 35, Davis discloses an OPAL wherein each record of the virtual smart card database also includes a funding account number wherein the funding account number identifies an account that contains a monetary amount that can be loaded onto a virtual smart card (column 2, lines 24-42).

Regarding claim 36, Davis discloses an OPAL server wherein the OPAL server is further configured to receive a purchase request message from a client terminal, wherein the purchase request message indicates a good or service to be purchased by a user, a user identifier, and a user password (column 4, lines 3-5; column 9, lines 3-10; column 13, line 63 – column 14, line 3).

Regarding claim 37, Davis discloses an OPAL server wherein the OPAL server is further configured to send a draw message request to a payment server, wherein the draw request message indicates an amount of money required to purchase the good or service and a merchant identifier (column 16, lines 22-38).

Regarding claim 38, Davis discloses an OPAL server wherein the OPAL server is further configured to receive a debit command from the payment server, wherein the debit command indicates an amount of money to debit from a respective virtual smart card (column 15, lines 22-28 and lines 37-55; column 19, lines 54-60).

Regarding claim 39, Davis discloses an OPAL server wherein the smart card emulator is configured to debit itself in response to the debit command by the amount of money indicated in the debit command (column 21, lines 38-41 and Figure 11A).

Regarding claim 40, Davis discloses an OPAL server wherein the OPAL server is further configured to send a debit response message to the client terminal, wherein the debit response message informs the user either that the amount of money has been debited from the smart card emulator (column 14, lines 56-58) or that money has not been debited from the smart card emulator due to a lack of sufficient funds (column 16, lines 10-12; column 17, lines 31-34).

Regarding claim 41, Davis discloses an on-line purchase and load (OPAL) server for performing a transaction over a network (column 6, lines 18-26) using a virtual smart card (column 11, lines 1-14), said OPAL comprising a virtual card database having a plurality of records (column 10, lines 60-63), each record including a virtual card identifier and a balance corresponding to a single smart card (column 11, lines 20-26 and lines 60-67; column 13, lines 3-6; column 16, lines 6-10 and lines 25-34); a hardware security module (column 8, lines 22-25; column 10, lines 54-58; and column 11, lines 48-67); a smart card emulator that receives smart card commands and processes said commands in conjunction with said virtual smart card database and said hardware security module (column 7, lines 6-21; column 8, lines 22-24; column 10, lines 50-65; and column 11, lines 48-57); the smart card emulator also configured to send a



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load request message to a load server, wherein the load request message indicates a virtual smart card identifier and a load amount for a respective virtual smart card, the load amount indicating an amount of money to load onto the respective virtual smart card (column 2, lines 24-42; column 3, lines 21-26; column 5, lines 32-34; column 8, lines 64-66, column 11, lines 1-6); and a pseudo card reader module that receives said smart card commands over said network and relays said commands to said smart card emulator, whereby said OPAL server performs a transaction over said network using one of said records in said virtual smart card database (column 7, lines 6-21; column 8, lines 22-24; column 10, lines 50-65; and column 11, lines 48-57).

Regarding claim 42, Davis discloses an OPAL server wherein the OPAL server is configured to receive a load command from a load server wherein the amount of money indicated in the load request message is loaded onto the respective virtual smart card (Figures 3 and 10; column 2, lines 24-42; column 3, lines 21-26; column 5, lines 30-38; column 8, lines 64-66; column 11, lines 1-15).

Regarding claim 43, Davis discloses an OPAL server wherein the smart card emulator is configured to send a load response message to a client terminal, wherein the load response message informs a user that the amount of money has been loaded onto the respective virtual smart card (column 2, lines 24-42; column 5, lines 32-34; column 7, lines 6-14; column 11, lines 1-6; column 28, lines 16-26).

### ***Response to Arguments***

Applicant's arguments filed March 22, 2006 have been fully considered but they are not persuasive.

Applicant argues that the Davis reference to a virtual card can not be relied upon for anticipation. However, any disclosure serves as prior art and the disclosure as part of the Davis description that other forms including a virtual card may also be one means of the invention (column 11, lines 10-14), establishes a virtual card as prior art within the disclosure of the invention and the description of functionality therein.

Applicant further argues that Davis does not disclose a "virtual smart card database" but rather claims managing a database. Examiner notes that it is well known in the art to use databases to store all varieties of information, including information about information relative to a virtual card. The Davis reference cites numerous references, as pointed out in the Applicant's amendment, to the use of databases for smart card information. It would be obvious to one of ordinary skill in the art that a database would be used to store information, per Davis's disclosure, relative to a virtual smart card.

### ***Conclusion***

Any inquiry concerning this communication should be directed to Jennifer Liversedge whose telephone number is 571-272-3167. The examiner can normally be reached on Monday – Friday, 8:30 – 5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sam Sough can be reached at 571-272-6799. The fax number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Liversedge

Examiner

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